DOCUMENT RESUME

ED 350 107 PS 020 866

AUTHOR Levy, Gary D.
TITLE Effects of Gender Constancy Understanding, Perceptions of Figure's Sex and Size, and Gender Schematization on Preschoolers' Gender-Typing: Sometimes Big Girls Do Cry.
PUB DATE 91
NOTE 21p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Body Height; *Preschool Children; Preschool Education; Sex Differences; *Sex Role; Sexual Identity; Social Cognition
IDENTIFIERS *Gender Constancy; Gender Schema Theory; Kohlberg (Lawrence)

ABSTRACT

This study examined the effects of children's understanding of gender constancy and their perceptions of differences in figures' sexes and relative body sizes on their attributions of gender-typed activities and characteristics. Interviews with 80 children between 3 and 6 years of age were conducted to ascertain the children's understanding of gender constancy. In a gender role attribution task, children were presented with drawings of a male and female figure of the same size, or two figures of the same sex but of different sizes. Children were then asked to identify which figure they thought would be most likely to engage in certain activities or act in a certain manner previously gender-typed as masculine or feminine. The results indicated that children attributed: (1) more masculine activities and characteristics to male than to female figures of the same size; (2) more masculine activities and characteristics to larger than to smaller male figures; (3) more feminine activities and characteristics to female than to male figures of the same size; and (4) more feminine activities and characteristics to larger than to smaller female figures. (SM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED350107

EFFECTS OF GENDER CONSTANCY UNDERSTANDING, PERCEPTIONS OF FIGURE'S SEX AND SIZE, AND GENDER SCHEMATIZATION ON PRESCHOOLERS' GENDER-TYPING: SOMETIMES BIG GIRLS DO CRY

Gary D. Levy

The University of Toledo

PS 020866

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Gary D. Levy
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Completion of this project was facilitated by funds from an Academic Challenge Award from the University of Toledo. Special thanks to the children, parents, and staff of Apple Tree Preschool of Toledo, Ohio.

For a more detailed version of this manuscript please write to the author at Department of Psychology, University of Toledo, 2801 West Bancroft, Toledo, OH 43606

BEST COPY AVAILABLE

ABSTRACT

Kohlberg stated that early gender-typing derives in large part from children's gender constancy understanding and their perceptions of sex-related, body size differences. The present study examined some of the effects of gender constancy understanding, perceptions of differences in figures' sex and relative body size, and gender schematization on eighty, 36 to 69 month-old preschoolers' gender-typed attributions. Results provide mixed support for some of Kohlberg's assertions. Preschoolers attributed more masculine and feminine items to larger male and female figures, but based more of their gender-typed attributions on a figure's sex when two figures were of the same-size. Although children's age and gender schematization were significant predictors of their correct gender-typed attributions, children's level of gender constancy understanding was not.

CONCEPTUAL BACKGROUND & AIMS

Kohlbergian theory and additional research purport that gender constancy understanding is one important component involved in early gender-role development and gender-typing. However in his seminal 1966 paper, Kohlberg also stated that gender-typing derives in large part out of young children's perceptions of sex-related, body size differences. Specifically, Kohlberg forwarded the idea that children associate, or fuse, different actions and psychological characteristics with males and females, in part because the two sexes typically differ in relative body size.

Recently, Gender Schema models and associated research indicate that the salience of gender-roles to young children also affects aspects of their gender-typing activities.

The present research examined the effects of children's gender constancy understanding, perceptions of differences in figures' sexes and relative body sizes, and gender schematization on their gender-typed attributions.

PREDICTIONS

1a) Based on Kohlbergian and Gender Schema models of gender-role development, children were predicted to attribute significantly more masculine items to:

a) male than to female figures of the same-size,

b) relatively larger than to relatively smaller figures of the same-sex.

1b) Children were also predicted to attribute significantly more

feminine items to:

a) female than to male figures of the same-size,

b) relatively smaller than to relatively larger figures of the same-sex.

2) Children's age and gender schematization were expected to be predictive of children's accurate gender-typed attributions. However, children's gender constancy understanding was expected to not be significantly associated with children's accurate gender-typed attributions.

METHOD & PARTICIPANTS

PARTICIPANTS

Eighty children (44 boys, 36 girls) ranging in age from 36 to 69 months (M = 54.5) participated. Participants were attending a suburban preschool.

PROCEDURE

Children were interviewed by a single interview session lasting about 25 minutes. Children's: (a) gender-typed attributions, (b) gender constancy, and (c) gender schematization were assessed. The order of administration of tasks was counterbalanced.

TASKS

1) GENDER-ROLE ATTRIBUTION TASK

Stimuli for the size stereotype measure consisted of two pairs of line drawings of male and female figures. One set of line drawings was 6.25 i x 3.00 i (larger) while the other set was 5.00 i X 2.50 i (smaller) in size. The two pairs of drawings

differed only in their size, not in their details or proportionality.

Drawings were mounted individually on poster board, laminated, and were presented to the child in pairs. Children were presented with: (a) either a male and a female figure of the same-size, or (b) two figures of the same-sex but of different relative sizes (i.e., one larger, one smaller).

After being presented with the figure pair, children were asked to indicate which figure they thought would be most likely to engage in a certain activity or to act in a particular manner (see Table One).

2) GENDER CONSTANCY INTERVIEW

This interview, developed by Carter & Levy (1988), represents a synthesis of previous verbal and pictorial measures of gender constancy. The interview consists of 13 questions and counter-questions assessing four levels of gender constancy understanding (lack of gender constancy, gender identification, personal gender permanence, and perceptual gender permanence).

Children were asked to: (1) identify their own sex and the sex of a presented figure; (2) indicate their understanding that sex does not change as a result of changes in play activities, desire, appearance or clothing; and 3) indicate their understanding that the sex of a figure does not change because of perceptual changes in play activities, desire, appearance or clothing. To be classified as achieving a given of gender constancy understanding, children had to answer all questions

within a particular level and, if applicable, in the previous level.

3) GENDER SCHEMATIZATION MEASURE

In this task 24, 10 x 10 cm black-and-white line drawings picturing a feminine-typed (kitchen set, doll, sewing machine), masculine-typed (gun, baseball bat and ball, truck), or gender-role neutral (drum, telephone, balloon) toy were used. These items were mounted in pairs on 21 x 28 cm sheets of cardboard and laminated.

Twelve pairs contrasted masculine and feminine toys, six pairs contrasted gender-typed toys (half feminine and half masculine) with gender-neutral toys, and six pairs contrasted two same-sex gender-typed toys (half masculine and half feminine).

Children were asked to indicate which toy in each pair was their favorite by pointing to and touching the preferred object as quickly as possible. Children's toy choices and response latencies (in hundredths of seconds) were recorded.

Two gender schematization scores were derived from each child's standardized reaction times. The Facilitative Score was the average of children's standardized reaction times to pairs consisting of masculine and feminine toys. The second score, termed the Inhibitory Score, consisted of the average of children's standardized reaction times to: 1) two masculine toys, 2) two feminine toys, and 3) two neutral toys.

RESULTS

1) Age-Related Changes in Gender Constancy Understanding

Results of a mixed design, main effects analysis of covariance conducted on children's level of gender constancy understanding, with children's sex (2) as the between subject variable and children's age in months as the covariate, indicated a significant ($p < .05$) main effect for children's age in months.

Examination of means (Table Two) indicated that, as expected, children at levels three and four were significantly older than children at level two (Table Two). All children achieved at least a level two understanding of gender constancy (gender identification).

2) Effects of Gender Constancy Understanding, Perceptions of Figure's Sex and Size on Children's Gender-Typed Attributions

Results of a series of mixed design, repeated measures analysis of covariance procedures conducted on children's gender-typed attributions, with children's level of gender constancy understanding (3) and children's sex (2) as between subject variables and children's age in months as the covariate, were computed.

Attributions of Masculine Items

As predicted, when presented with a male and a female figure of the same size, children attributed more (Larger stimuli: $p < .10$; Smaller stimuli: $p < .10$) masculine acts and psychological characteristics to males than to females. Significant differences between younger and older, and male and female, children's patterns of responses also emerged (Table Two).

Also as expected, when presented with two male figures differing in relative size, children attributed more ($p < .10$) masculine acts and psychological characteristics to larger than to smaller. Significant differences between younger and older, and male and female, children's patterns of responses were also observed (Table Two).

Attributions of Feminine Items

When presented with a male and a female figure of the same smaller size, children attributed more (Smaller stimuli: $p < .0003$) feminine acts and psychological characteristics to females than to males. Significant differences between younger and older, and male and female, children's patterns of responses also emerged (Table Two).

Counter to predictions, when presented with two female figures differing in relative size, children attributed significantly ($p < .0002$) more feminine acts and psychological characteristics to larger than to smaller females. Significant differences between younger and older, and male and female, children's patterns of responses also emerged (Table Two).

3) Effects of Gender Schematization on Children's Gender-Typed Attributions

Results of a multiple regression with a model containing children's age in months, gender constancy understanding, sex, and gender schematization as predictor variables was conducted on children's overall correct gender-typed attributions.

As predicted, the model predicting children's correct gender-typed attributions was significant ($p < .002$) with children's age in months ($p < .0005$) and gender schematization (Facilitative Score; ($p < .05$) contributing significantly and positively to the model. Examination of means and simple correlations (Table Two) indicated that children high in gender schematization were more accurate in their gender-typed

attributions than less schematic children, and that older children were more accurate than younger children.

CONCLUSIONS

Results supported some of Kohlberg's assertions regarding relations between children's perceptions of body size differences and their gender-typing. Consistent with Kohlberg, children attributed more masculine gender-typed items to larger, compared to smaller, male and female figures. However, children also attributed more feminine items to larger, compared to smaller, male and female figures, although to a lesser degree. Also, several age and sex-related differences in children's responses supported some of Kohlberg's claims regarding the importance of relative size in children's gender-typing. Consistent with gender schema approaches, children consistently based their gender-typed attributions on the sex of the figure, when both figures were of the same size. Also, children's gender schematization, and not their gender constancy understanding per se, was significantly predictive of children's gender-typed attributions.

TABLE ONE

Gender-typed Psychological Characteristics and Acts

1) MASCULINE ITEMS

Psychological Characteristics

1) AGGRESSIVE
(Who gets into more fights,
pushes people around)

2) STRONG / POWERFUL
(Who is the stronger person,
can push, move & lift heavy things)

3) SOCIAL POWER
(Who makes most of the rules & makes sure people follow them)

4) SMARTER
(Who knows more about different things)

Activities

1) PLAY FOOTBALL
2) WORK WITH TOOLS (CARPENTRY)

TABLE ONE Continued

2) FEMININE ITEMS

Psychological characteristics

1) AFFECTIONATE / NURTURANT
(Who likes to hug and kiss &
take care of people / children)

2) ATTRACTIVE
(Who is the prettier person, is better looking)

3) EMOTIONAL / SENSITIVE
(Who cries a lot, is more emotional, worries about others' feelings)

4) NICER / GOOD
(Who is a nicer person,
is a really nice and good person)

Activities

1) SEW
2) TAKE CARE OF A BABY

TABLE TWO

Children's Mean Gender-Typed Attributions

SAME-SIZE FIGURES OF DIFFERENT SEXES

LARGER FIGURES: MASCULINE CHARACTERISTICS

	MALE	FEMALE
OVERALL (N=80)	70.83	29.16
BOYS (n=44)	84.09	15.91
GIRLS (n=36)	54.63	45.37
YOUNGER (n=40)	70.00	30.00
OLDER (n=40)	71.67	28.33

TABLE TWO continued

SMALLER FIGURES: MASCULINE CHARACTERISTICS

	MALE	FEMALE
OVERALL (N=80)	53.33	46.67
BOYS (n=44)	56.82	43.18
GIRLS (n=36)	49.07	50.93
YOUNGER (n=40)	47.50	52.50
OLDER (n=40)	59.17	40.83

TABLE TWO continued

SAME-SIZE FIGURES OF DIFFERENT SEXES

LARGER FIGURES: FEMININE CHARACTERISTICS

	MALE	FEMALE
OVERALL (N=80)	34.58	65.42
BOYS (n=44)	40.91	59.09
GIRLS (n=36)	54.63	45.37
YOUNGER (n=40)	36.67	63.33
OLDER (n=40)	32.50	67.50

TABLE TWO continued

SMALLER FIGURES: FEMININE CHARACTERISTICS

	MALE	FEMALE
OVERALL (N=80)	39.17	60.83
BOYS (n=44)	42.42	57.58
GIRLS (n=36)	35.19	64.81
YOUNGER (n=40)	47.50	52.50
OLDER (n=40)	30.83	69.17

TABLE TWO continued

SAME-SEX FIGURES OF DIFFERENT SIZES

MALES FIGURES: MASCULINE CHARACTERISTICS

	SMALLER	LARGER
OVERALL (N=80)	20.42	79.58
BOYS (n=44)	22.73	77.27
GIRLS (n=36)	17.59	82.41
YOUNGER (n=40)	21.67	78.33
OLDER (n=40)	19.17	80.83

TABLE TWO continued

FEMALE FIGURES: MASCULINE CHARACTERISTICS

	SMALLER	LARGER
OVERALL (N=80)	29.17	70.83
BOYS (n=44)	27.27	72.73
GIRLS (n=36)	34.26	65.74
YOUNGER (n=40)	28.33	71.67
OLDER (n=40)	30.00	70.00

TABLE TWO continued

SAME-SEX FIGURES OF DIFFERENT SIZES

MALES FIGURES: FEMININE CHARACTERISTICS

	SMALLER	LARGER
OVERALL (N=80)	42.92	57.08
BOYS (n=44)	42.42	57.58
GIRLS (n=36)	43.52	56.48
YOUNGER (n=40)	39.16	60.83
OLDER (n=40)	46.67	53.33

TABLE TWO continued

FEMALE FIGURES: FEMININE CHARACTERISTICS

	SMALLER	LARGER
OVERALL (N=80)	39.17	60.83
BOYS (n=44)	43.18	56.82
GIRLS (n=36)	34.26	65.74
YOUNGER (n=40)	33.33	66.67
OLDER (n=40)	45.00	55.00